

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)								DATE February 1999																																																									
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0203726A Advanced Field Artillery Tactical Data System																																																													
COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost																																																							
Total Program Element (PE) Cost	36225	34646	36222	34528	31191	25086	14857	12896	0	649731																																																							
D322 AFATDS Development	32078	30664	34264	30943	27835	23118	12891	12896	0	620918																																																							
D2ET AFATDS Operational Test	4147	3982	1958	3585	3356	1968	1966	0	0	28813																																																							
<p>A. Mission Description and Budget Item Justification: The Advanced Field Artillery Tactical Data System (AFATDS) will broaden and modernize the US Army fire support command, control and communications (C3) system. As a battle management system, AFATDS will provide automated fire support in the Army Battle Command System (ABCS) architecture in support of close, rear and deep operations, fire planning and the coordination and employment of all service/combined fire support assets to complement the commander's scheme of maneuver. AFATDS will accomplish this by providing fully automated support for planning, coordination and control of all fire support assets (mortars, close air support, naval gunfire, attack helicopters, offensive electronic warfare, field artillery cannons, rockets and guided missiles) in the execution of close support, counterfire, interdiction, suppression of enemy air defense and deep operations. AFATDS will automatically implement detailed commander's guidance in the automation of operational planning, movement control, targeting, target value analysis and fire support planning. These projects support development of a replacement system for the Initial Fire Support Automated System (IFSAS).</p>																																																																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">B. Program Change Summary</th> <th style="text-align: center;"><u>FY 1998</u></th> <th style="text-align: center;"><u>FY 1999</u></th> <th style="text-align: center;"><u>FY 2000</u></th> <th style="text-align: center;"><u>FY 2001</u></th> </tr> </thead> <tbody> <tr> <td>Previous President's Budget (FY 1999, PB)</td> <td style="text-align: right;">37455</td> <td style="text-align: right;">35111</td> <td style="text-align: right;">25814</td> <td style="text-align: right;">16907</td> </tr> <tr> <td>Appropriated Value</td> <td style="text-align: right;">39039</td> <td style="text-align: right;">34881</td> <td></td> <td></td> </tr> <tr> <td>Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>a. Congressional General Reductions</td> <td style="text-align: right;">-1584</td> <td style="text-align: right;">-235</td> <td></td> <td></td> </tr> <tr> <td>b. SBIR / STTR</td> <td style="text-align: right;">-924</td> <td></td> <td></td> <td></td> </tr> <tr> <td>c. Omnibus or Other Above Threshold Reductions</td> <td style="text-align: right;">-306</td> <td></td> <td></td> <td></td> </tr> <tr> <td>d. Below Threshold Reprogramming</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>e. Rescissions</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Adjustments to Budget Years Since FY 1999, PB</td> <td></td> <td></td> <td style="text-align: right;">+10408</td> <td style="text-align: right;">+17621</td> </tr> <tr> <td>Current Budget Submit (FY 2000 / 2001 PB)</td> <td style="text-align: right;">36225</td> <td style="text-align: right;">34646</td> <td style="text-align: right;">36222</td> <td style="text-align: right;">34528</td> </tr> </tbody> </table>											B. Program Change Summary	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	Previous President's Budget (FY 1999, PB)	37455	35111	25814	16907	Appropriated Value	39039	34881			Adjustments to Appropriated Value					a. Congressional General Reductions	-1584	-235			b. SBIR / STTR	-924				c. Omnibus or Other Above Threshold Reductions	-306				d. Below Threshold Reprogramming					e. Rescissions					Adjustments to Budget Years Since FY 1999, PB			+10408	+17621	Current Budget Submit (FY 2000 / 2001 PB)	36225	34646	36222	34528
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<p>Change Summary Explanation: Increase in FY00 and FY01 is to support the development of software IAW the AFATDS System Acquisition Program Baseline.</p>																																																																	

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BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0203726A Advanced Field Artillery Tactical Data System				PROJECT D322		
COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
D322 AFATDS Development	32078	30664	34264	30943	27835	23118	12891	12896	0	620918

Mission Description and Budget Item Justification: **Project D322 – AFATDS Development:** The project is composed of Army Battlefield Command System (ABCS) Common Hardware/Software (CHS) employed in varying configurations at different operational facilities (or nodes) and unique system software interconnected by tactical communications in the form of a software-driven, automated network. Both hardware and software will be capable of being tailored to perform the fire support command, control and coordination requirements at any level of command. This will permit variable command and control relationships and full fire support functionality at all echelons of field artillery and maneuver, from echelons above corps to battery or company in support of all levels of conflict. The Marine Corps will also utilize AFATDS. AFATDS will interoperate with Navy and Air Force Command and Control weapon systems as well as the Allied fire support systems ADLER (Germany), ATLAS (France), BATES (UK), and SIR (Italy).

FY 1998 Accomplishments:

- 6323 Supported Limited User Test and Materiel Release of AFATDS '97 Software Release (1 package)
- 24955 Continued AFATDS software development
- 800 Prepared for AFATDS '98 Limited User Test

Total 32078

FY 1999 Planned Program:

- 4323 Support Limited User Test and Materiel Release of AFATDS '98 Software Release (1 package)
- 24749 Continue AFATDS software development in support of FDD/FDC
- 800 Prepare for AFATDS '99 Limited User Test
- 792 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs

Total 30664

FY 2000 Planned Program:

- 4876 Support Limited User Test and Materiel Release of AFATDS '99 Software Release (1 package)
- 29388 Continue AFATDS software development in support of FDD/FDC.

Total 34264

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BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0203726A Advanced Field Artillery Tactical Data System			PROJECT D322																																																																									
FY 2001 Planned Program: <ul style="list-style-type: none"> • 2610 Support Limited User Test and Materiel Release of AFATDS '99 Software Release (1 package) • 28333 Continue AFATDS software development in support of FDD/FDC. Total 30943																																																																																	
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<p>C. Acquisition Strategy: AFATDS software will be developed in incremental releases. AFATDS '96, previously named Version 1, received Materiel Release on 13 December 1996. It automated 51% of the required tasks including fire support planning, target nomination, order of fire, and meteorological/survey operations. Subsequent releases will add additional functions, providing automated capabilities for the required tasks including fire support sensor planning and additional munitions. Completion of AFATDS '04 will result in automation of all the required tasks to meet the objective system, including full fire support planning, target acquisition support and field artillery mission support. Additionally, the completed software will utilize the Joint Common Operating Environment (JCOE) and the Army Technical Architecture. AFATDS will support FDD/FDC and other Army Warfighter Experiments through FY 2004.</p>																																																																																	
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<div style="display: flex; justify-content: space-between;"> Project D322 Page 3 of 8 Pages Exhibit R-2A (PE 0203726A) </div>																																																																																	

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ARMY RDT&E COST ANALYSIS (R-3)										DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development					PE NUMBER AND TITLE 0203726A Advanced Field Artillery Tactical Data System					PROJECT D322		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Software Development	SS/CPAF	Raytheon Systems Corp (prev. MX, HDC)	198292	26269	Jan 99	30348	Jan 00	27604	Jan 01	65320	347833	
b. Various, MX BOA	CPAF	Magnavox	34891	0						0	34891	
c. STRICOM/FSATS	MIPR	ARL/UT	12092	0						0	12092	
d. COE/Common Software	MIPR	DISA/ATCCS	11174	800	Jan 99	558	Jan 00	200		0	12732	
e. NRAD		USMC/Navy	244	0						0	244	
f. ADCCS	MIPR	ADCCS	2200	0						0	2200	
g. GFE: PSE	C/FFP	Miltope, Litton, GTE	37897	90	Jan 99	583	Jan 00	553	Jan 01	1144	40267	
Subtotal Product Development:			296790	27159		31489		28357		66464	450259	
II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Software Development Support	MIPR	CECOM SED	4345	281		362		366		1486	6840	
b. Software Development Support	MIPR	FSSD/TELOS	6065	720		613		417		1510	9325	
Subtotal Support Costs:			10410	1001		975		783		2996	16165	
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. OPTEC			6081	0						0	6081	
b. Test Management	MIPR	CECOM	1985	415		430		468		1575	4873	
c. TEST HARDWARE			18041	0						0	18041	
d. Test Support	MIPR	Misc	3455								3455	
Subtotal Test and Evaluation:			29562	415		430		468		1575	32450	
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ARMY RDT&E COST ANALYSIS (R-3)

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BUDGET ACTIVITY

7 - Operational System Development

PE NUMBER AND TITLE

0203726A Advanced Field Artillery Tactical Data
System

PROJECT

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IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. PM Support	C/CPFF	CSC, NJ	11033	520		502		517		2451	15023	
b. PROGRAM MANAGEMENT:												
c. PM FATDS			19063	451		534		459		1777	22284	
d. MATRIX			15473	326		334		359		1477	17969	
e. Misc. Contracts												
f. CECOM			65976								65976	
g. SBIR/STTR				792							792	
Subtotal Management Services:			111545	2089		1370		1335		5705	122044	

Project Total Cost:			448307	30664		34264		30943		76740	620918	
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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)								DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0203726A Advanced Field Artillery Tactical Data System				PROJECT D2ET		
COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
D2ET AFATDS Operational Test	4147	3982	1958	3585	3356	1968	1966	0	0	28813
<p>A. <u>Mission Description and Budget Item Justification:</u> Project D2ET – AFATDS Operational Test: This project finances the direct costs of planning and conducting operational testing and evaluation of the Advanced Field Artillery Tactical Data System (AFATDS) by the Operational Test and Evaluation Command (OPTEC). AFATDS is an Acquisition Category (ACAT) I system which passed the Initial Operational Tests and Evaluation (IOTE) in FY 95. Limited User Tests (LUTs) are planned for AFATDS software releases in FY98, FY99, FY00, FY01, FY03 and FY04. LUTs are conducted under conditions, as close as possible, to those encountered in actual combat with typical user troops trained to employ the system. OPTEC provides Army leadership with an independent test and evaluation of effectiveness and suitability of the system.</p> <p>FY 1998 Accomplishments:</p> <ul style="list-style-type: none"> • 1714 Conducted AFATDS '97 LUT and evaluate test results • 2433 Prepared for AFATDS '98 Limited User Test (LUT) Total 4147 <p>FY 1999 Planned Program:</p> <ul style="list-style-type: none"> • 1648 Conduct AFATDS '98 LUT and evaluate test results • 1410 Prepare for AFATDS '99 LUT • 818 Prepare for and Support ABCS testing • 106 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs Total 3982 <p>FY 2000 Planned Program:</p> <ul style="list-style-type: none"> • 1631 Conduct AFATDS '99 LUT and evaluate test results • 327 Prepare for and Support ABCS testing Total 1958 <p>FY 2001 Planned Program:</p> <ul style="list-style-type: none"> • 3585 Prepare for and Conduct AFATDS '02 LUT Total 3585 										
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0203726A Advanced Field Artillery Tactical Data
System

PROJECT

D2ET

B. Other Program Funding Summary: Not ApplicableC. Acquisition Strategy: Not Applicable

D. Schedule Profile	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
AFATDS '97 LUT	1Q							
AFATDS '98 LUT		2Q						
AFATDS '99 LUT			3Q					
AFATDS '02 LUT				4Q				
AFATDS '03 LUT						1Q		
AFATDS '04 LUT							2Q	

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